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(71) Applicant (for all designated States except US): OUT-OKUMPU OYJ [FI/FI]; Riihitontuntie 7, FIN-02200 Espoo (FI).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HIRSCH, Martin [DE/DE]; Am Vogelschutz 5, 61381 Friedrichsdorf (DE). STRÖDER, Michael [DE/DE]; Dürerstrasse 77, 61267 Neu-Anspach (DE). WEBER, Peter [DE/FI]; Kuninkaalahtentie 6C, FIN-02160 Espoo (FI).

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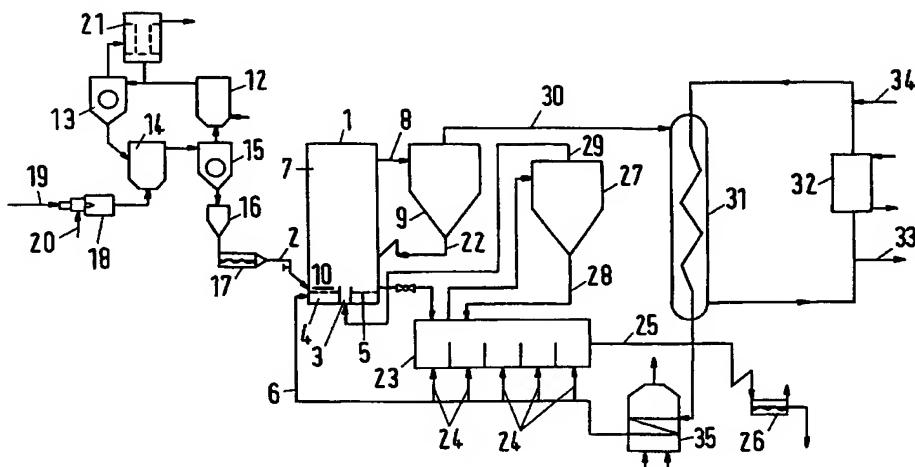
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(54) Title: METHOD AND PLANT FOR THE HEAT TREATMENT OF SOLIDS CONTAINING IRON OXIDE



(57) Abstract: A method for the heat treatment of solids containing iron oxide, in which fine-grained solids are heated to a temperature of about 630°C in a fluidized-bed reactor (1). To improve the utilization of energy, it is proposed to introduce a first gas or gas mixture from below through a supply tube (3) into a mixing chamber (7) of the reactor (1), the gas supply tube (3) being at least partly surrounded by a stationary annular fluidized bed (10) which is fluidized by supplying fluidizing gas. The gas velocities of the first gas or gas mixture and of the fluidizing gas for the annular fluidized bed (10) are adjusted such that the Particle-Froude-Numbers in the gas supply tube (3) are between 1 and 100, in the annular fluidized bed (10) between 0.02 and 2, and in the mixing chamber (7) between 0.3 and 30.

WO 2004/057044 A3



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# INTERNATIONAL SEARCH REPORT

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**A. CLASSIFICATION OF SUBJECT MATTER**  
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**B. FIELDS SEARCHED**

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

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**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category ° | Citation of document, with indication, where appropriate, of the relevant passages        | Relevant to claim No. |
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| A          | US 4 806 158 A (HIRSCH MARTIN ET AL)<br>21 February 1989 (1989-02-21)<br>abstract<br>---  | 1-18                  |
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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

**ANNA-MAJ MAGNUSSON/ELY**

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